

I CLAIM:

1. A radiant heating unit comprising:
 - (a) a supply for providing a quantity of fuel in vapor form at a predetermined pressure;
 - 5 (b) means to mix air into said fuel to produce a combustible fuel/air mixture;
 - (c) a housing having a periphery surrounding an open bottom;
 - (d) a removable and replaceable cartridge being affixed to said periphery, said cartridge covering said open bottom, with a skirt extending downward beyond said cartridge, said
10 housing and said cartridge defining a chamber, said cartridge separating said chamber from ambient air;
 - (e) said chamber being connected to receive said fuel/air mixture;
 - 15 (f) said cartridge being removable from and replaceable in said housing, said cartridge containing multiple layers of non-flammable materials that are bound together into one unit, said layers being porous enough to allow said fuel/air mixture to pass through said layers but sufficiently dense to
20 prevent large amounts of ambient air from entering said chamber through said cartridge so that combustion occurs at an outer surface of an outermost layer.
2. A radiant heating unit as claimed in Claim 2 wherein one layer of the cartridge is ceramic wool.
- 25 3. A radiant heating unit as claimed in Claim 2 wherein there is a stainless steel mesh located above the layer of ceramic wool.
4. A radiant heating unit as claimed in Claim 3 wherein the cartridge has an expandable metal screen located above the stainless steel mesh and an aluminum screen located between the stainless steel mesh and the
30 ceramic wool.
5. A radiant heating unit as claimed in Claim 4 wherein the layers of the cartridge are bound together by a border which surrounds a periphery

of the layers, said layers being crimped between an upper and lower section of said border.

6. A radiant heating unit as claimed in Claim 5 wherein there is a seal between said border and said layers.

5 7. A radiant heating means as claimed in Claim 1 wherein said skirt is rugged enough to protect said cartridge when said cartridge is properly installed within the housing.

8. A radiant heating unit as claimed in Claim 1 wherein said cartridge is held in place within said housing by a maximum of eight retainers.

10 9. A radiant heating unit as claimed in Claim 6 wherein there is a return line to said supply to return liquid fuel to said supply.

10. A radiant heating unit as claimed in Claim 1 wherein said cartridge is sandwiched between said skirt and said housing.

11. A radiant heating unit as claimed in Claim 2 wherein there is no
15 pump in said unit.

12. A heating unit as claimed in Claim 1 wherein the means to mix is a venturi.

13. A heating unit as claimed in Claim 1 wherein the fuel is propane.

14. A heating unit as claimed in Claim 1 wherein the chamber contains
20 a deflector to distribute the fuel/air mixture.